



SEQUENCE LISTING

<110> Hunter, Tony
Kun Ping, Lu

<120> NIMA INTERACTING PROTEINS

<130> 66671-043

<140> US 10/616,410

<141> 2003-07-08

<150> US 09/275,900

<151> 1999-03-24

<160> 22

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 1014

<212> DNA

<213> Homo sapiens

<220>

<221> CDS

<222> (25)...(513)

<400> 1

tgctggccag cacctcgagg gaag atg gcg gac gag gag aag ctg ccg ccc 51
Met Ala Asp Glu Glu Lys Leu Pro Pro

1 5

ggc tgg gag aag cgc atg agc cgc agc tca ggc cga gtg tac tac ttc 99
Gly Trp Glu Lys Arg Met Ser Arg Ser Ser Gly Arg Val Tyr Tyr Phe
10 15 20 25

aac cac atc act aac gcc agc cag tgg gag cgg ccc agc ggc aac agc 147
Asn His Ile Thr Asn Ala Ser Gln Trp Glu Arg Pro Ser Gly Asn Ser
30 35 40

agc agt ggt ggc aaa aac ggg cag ggg gag cct gcc agg gtc cgc tgc 195
Ser Ser Gly Gly Lys Asn Gly Gln Gly Glu Pro Ala Arg Val Arg Cys
45 50 55

tcg cac ctg ctg gtg aag cac agc cag tca cgg cgg ccc tcg tcc tgg 243
Ser His Leu Leu Val Lys His Ser Gln Ser Arg Arg Pro Ser Ser Trp
60 65 70

cgg cag gag aag atc acc cgg acc aag gag gag gcc ctg gag ctg atc 291
Arg Gln Glu Lys Ile Thr Arg Thr Lys Glu Glu Ala Leu Glu Leu Ile

75 80 85

aac ggc tac atc cag aag atc aag tcg gga gag gag gac ttt gag tct 339
Asn Gly Tyr Ile Gln Lys Ile Lys Ser Gly Glu Glu Asp Phe Glu Ser
90 95 100 105

ctg gcc tca cag ttc agc gac tgc agc tca gcc aag gcc agg gga gac 387
Leu Ala Ser Gln Phe Ser Asp Cys Ser Ser Ala Lys Ala Arg Gly Asp
110 115 120

ctg ggt gcc ttc agc aga ggt cag atg cag aag cca ttt gaa gac gcc 435
Leu Gly Ala Phe Ser Arg Gly Gln Met Gln Lys Pro Phe Glu Asp Ala
125 130 135

tcg ttt gcg ctg cgg acg ggg gag atg agc ggg ccc gtg ttc acg gat 483
Ser Phe Ala Leu Arg Thr Gly Glu Met Ser Gly Pro Val Phe Thr Asp
140 145 150

tcc ggc atc cac atc atc ctc cgc act gag tgaggggtggg gagcccaggc 533
Ser Gly Ile His Ile Ile Leu Arg Thr Glu
155 160

ctggcctcgg ggcagggcag ggcggctagg ccggccagct cccccttgcc cgccagccag 593
tggccgaacc cccactccc tgccaccgtc acacagtatt tattgttccc acaatggctg 653
ggaggggggcc cttccagatt gggggccctg ggggtcccccac tccctgtcca tccccagttg 713
gggctgcgac cgccagattc tcccttaagg aattgacttc agcaggggtg ggaggctccc 773
agacccaggg cagtgtggtg ggaggggtgt tccaaagaga aggcctggtc agcagagccg 833
ccccgtgtcc cccaggtgc tggaggcaga ctcgagggcc gaattgtttc tagttaggcc 893
acgctcctct gttagtcgc aaaggtgaac actcatgcgg cagccatggg ccctctgagc 953
aactgtgcag accctttcac ccccaattaa acccagaacc actaaaaaaaa aaaaaaaaaa 1013
a 1014

<210> 2
<211> 163
<212> PRT
<213> Homo sapiens

<400> 2

Met Ala Asp Glu Glu Lys Leu Pro Pro Gly Trp Glu Lys Arg Met Ser
1 5 10 15
Arg Ser Ser Gly Arg Val Tyr Tyr Phe Asn His Ile Thr Asn Ala Ser
20 25 30
Gln Trp Glu Arg Pro Ser Gly Asn Ser Ser Ser Gly Gly Lys Asn Gly
35 40 45
Gln Gly Glu Pro Ala Arg Val Arg Cys Ser His Leu Leu Val Lys His
50 55 60
Ser Gln Ser Arg Arg Pro Ser Ser Trp Arg Gln Glu Lys Ile Thr Arg
65 70 75 80
Thr Lys Glu Glu Ala Leu Glu Leu Ile Asn Gly Tyr Ile Gln Lys Ile
85 90 95
Lys Ser Gly Glu Glu Asp Phe Glu Ser Leu Ala Ser Gln Phe Ser Asp
100 105 110
Cys Ser Ser Ala Lys Ala Arg Gly Asp Leu Gly Ala Phe Ser Arg Gly

	115		120		125										
Gln	Met	Gln	Lys	Pro	Phe	Glu	Asp	Ala	Ser	Phe	Ala	Leu	Arg	Thr	Gly
	130					135					140				
Glu	Met	Ser	Gly	Pro	Val	Phe	Thr	Asp	Ser	Gly	Ile	His	Ile	Ile	Leu
145					150					155					160
Arg	Thr	Glu													

<210> 3
 <211> 31
 <212> DNA
 <213> Homo sapiens

<400> 3
 gcgcctgcag tatctataya tggaataytg t 31

<210> 4
 <211> 31
 <212> DNA
 <213> Homo sapiens

<400> 4
 gcgcggatcc rggtttcaga ggktyraasa g 31

<210> 5
 <211> 30
 <212> DNA
 <213> Homo sapiens

<400> 5
 gcgcgtacca agwccacygt ayattattcc 30

<210> 6
 <211> 13
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> synthetic peptide

<400> 6
 Met Tyr Asp Val Pro Asp Tyr Ala Ser Arg Pro Gln Asn
 1 5 10

<210> 7
 <211> 32
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> synthetic peptide

<400> 7

Met	Ala	Ser	Tyr	Pro	Tyr	Asp	Val	Pro	Asp	Tyr	Ala	Ser	Pro	Glu	Phe
1				5				10					15		
Leu	Val	Asp	Pro	Pro	Gly	Ser	Lys	Asn	Ser	Ile	Ala	Arg	Gly	Lys	Met
		20					25						30		

<210> 8

<211> 39

<212> PRT

<213> Homo sapiens

<400> 8

Glu	Lys	Leu	Pro	Pro	Gly	Trp	Glu	Lys	Arg	Met	Ser	Arg	Ser	Ser	Gly
1				5				10					15		
Arg	Val	Tyr	Tyr	Phe	Asn	His	Ile	Thr	Asn	Ala	Ser	Gln	Trp	Glu	Arg
		20					25					30			
Pro	Ser	Gly	Asn	Ser	Ser	Ser									
		35													

<210> 9

<211> 39

<212> PRT

<213> Yeast ESS1

<400> 9

Thr	Gly	Leu	Pro	Thr	Pro	Trp	Thr	Val	Arg	Tyr	Ser	Lys	Ser	Lys	Lys
1				5				10					15		
Arg	Glu	Tyr	Phe	Phe	Asn	Pro	Glu	Thr	Lys	His	Ser	Gln	Trp	Glu	Glu
		20					25					30			
Pro	Glu	Gly	Thr	Asn	Lys	Asp									
		35													

<210> 10

<211> 38

<212> PRT

<213> Homo sapiens

<400> 10

Val	Pro	Leu	Pro	Ala	Gly	Trp	Glu	Met	Ala	Lys	Thr	Ser	Ser	Gly	Gln
1				5				10					15		
Arg	Tyr	Phe	Leu	Asn	His	Ile	Asp	Gln	Thr	Thr	Thr	Trp	Gln	Asp	Pro
		20					25					30			
Arg	Lys	Ala	Met	Leu	Ser										
		35													

<210> 11

<211> 38

<212> PRT

<213> Mus musculus

<400> 11

```
Ser Pro Leu Pro Pro Gly Trp Glu Glu Arg Gln Asp Val Leu Gly Arg
 1              5              10              15
Thr Tyr Tyr Val Asn His Glu Ser Arg Arg Thr Gln Trp Lys Arg Pro
              20              25              30
Ser Pro Asp Asp Asp Leu
              35
```

<210> 12

<211> 38

<212> PRT

<213> Yeast RSPS

<400> 12

```
Gly Arg Leu Pro Pro Gly Trp Glu Arg Arg Thr Asp Asn Phe Gly Arg
 1              5              10              15
Thr Tyr Tyr Val Asp His Asn Thr Arg Thr Thr Thr Trp Lys Arg Pro
              20              25              30
Thr Leu Asp Gln Thr Glu
              35
```

<210> 13

<211> 38

<212> PRT

<213> Homo sapiens

<400> 13

```
Thr Ser Val Gln Gly Pro Trp Glu Arg Ala Ile Ser Pro Asn Lys Val
 1              5              10              15
Pro Tyr Tyr Ile Asn His Glu Thr Gln Thr Thr Cys Trp Asp His Pro
              20              25              30
Lys Met Thr Glu Leu Tyr
              35
```

<210> 14

<211> 37

<212> PRT

<213> Rattus rattus

<400> 14

```
Ser Asp Leu Pro Ala Gly Trp Met Arg Val Gln Asp Thr Ser Gly Thr
 1              5              10              15
Tyr Tyr Trp His Ile Pro Thr Gly Thr Thr Gln Trp Glu Pro Pro Gly
              20              25              30
Arg Ala Ser Pro Ser
              35
```

<210> 15
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> consensus sequence

<400> 15
Leu Pro Gly Trp Glu Gly Tyr Tyr Asn His Thr Thr Trp Pro
1 5 10

<210> 16
<211> 105
<212> PRT
<213> Homo sapiens

<400> 16
His Leu Leu Val Lys His Ser Gln Ser Arg Arg Pro Ser Ser Trp Arg
1 5 10 15
Gln Glu Lys Ile Thr Arg Thr Lys Glu Glu Ala Leu Glu Leu Ile Asn
20 25 30
Gly Tyr Ile Gln Lys Ile Lys Ser Gly Glu Glu Asp Phe Glu Ser Leu
35 40 45
Ala Ser Gln Phe Ser Asp Cys Ser Ser Ala Lys Ala Arg Gly Asp Leu
50 55 60
Gly Ala Phe Ser Arg Gly Gln Met Gln Lys Pro Phe Glu Asp Ala Ser
65 70 75 80
Phe Ala Leu Arg Thr Gly Glu Met Ser Gly Pro Val Phe Thr Asp Ser
85 90 95
Gly Ile His Ile Ile Leu Arg Thr Glu
100 105

<210> 17
<211> 107
<212> PRT
<213> Yeast ESS1

<400> 17
His Ile Leu Ile Lys His Lys Asp Ser Arg Arg Pro Ala Ser His Arg
1 5 10 15
Ser Glu Asn Ile Thr Ile Ser Lys Gln Asp Ala Thr Asp Glu Leu Lys
20 25 30
Thr Leu Ile Thr Arg Leu Asp Asp Asp Ser Lys Thr Asn Ser Phe Glu
35 40 45
Ala Leu Ala Lys Glu Arg Ser Asp Cys Ser Ser Tyr Lys Arg Gly Gly
50 55 60
Asp Leu Gly Trp Phe Gly Arg Gly Glu Met Gln Pro Ser Phe Glu Asp
65 70 75 80
Ala Ala Phe Gln Leu Lys Val Gly Glu Val Ser Asp Ile Val Glu Ser
85 90 95

Gly Ser Gly Val His Val Ile Lys Arg Val Gly
100 105

<210> 18
<211> 83
<212> PRT
<213> E. coli

<400> 18
His Ile Leu Val Lys Glu Glu Lys Leu Ala Leu Asp Leu Leu Glu Gln
1 5 10 15
Ile Lys Asn Gly Ala Asp Phe Gly Lys Leu Ala Lys Lys His Ser Ile
20 25 30
Cys Pro Ser Gly Lys Arg Gly Gly Asp Leu Gly Glu Phe Arg Gln Gly
35 40 45
Gln Met Val Pro Ala Phe Asp Lys Val Val Phe Ser Cys Pro Val Leu
50 55 60
Glu Pro Thr Gly Pro Leu His Thr Gln Phe Gly Tyr His Ile Ile Lys
65 70 75 80
Val Leu Tyr

<210> 19
<211> 84
<212> PRT
<213> B.subtilis

<400> 19
His Ile Leu Val Ala Asp Lys Lys Thr Ala Glu Glu Val Glu Lys Lys
1 5 10 15
Leu Lys Lys Gly Glu Lys Phe Glu Asp Leu Ala Lys Glu Tyr Ser Thr
20 25 30
Asp Ser Ser Ala Ser Lys Gly Gly Asp Leu Gly Trp Phe Ala Lys Glu
35 40 45
Gly Gln Met Asp Glu Thr Phe Ser Lys Ala Ala Phe Lys Leu Lys Thr
50 55 60
Gly Glu Val Ser Asp Pro Val Lys Thr Gln Tyr Gly Tyr His Ile Ile
65 70 75 80
Lys Lys Thr Glu

<210> 20
<211> 91
<212> PRT
<213> C. jejuni

<400> 20
His Ile Leu Val Ala Thr Glu Lys Glu Ala Lys Asp Ile Ile Asn Glu
1 5 10 15
Leu Lys Gly Leu Lys Gly Lys Glu Leu Asp Ala Lys Phe Ser Glu Leu
20 25 30

Ala	Lys	Glu	Lys	Ser	Ile	Asp	Pro	Gly	Ser	Lys	Asn	Gln	Gly	Gly	Glu
	35						40				45				
Leu	Gly	Trp	Phe	Asp	Gln	Ser	Thr	Met	Val	Lys	Pro	Phe	Thr	Asp	Ala
	50				55					60					
Ala	Phe	Ala	Leu	Lys	Asn	Gly	Thr	Ile	Thr	Thr	Thr	Pro	Val	Lys	Thr
65					70				75						80
Asn	Phe	Gly	Tyr	His	Val	Ile	Leu	Lys	Glu	Asn					
				85					90						

<210> 21
 <211> 67
 <212> PRT
 <213> A. thaliana

<400> 21

Ile	Val	Ser	Lys	Ala	Asn	Phe	Glu	Glu	Val	Ala	Thr	Arg	Val	Ser	Asp
1				5					10					15	
Cys	Ser	Ser	Ala	Lys	Arg	Gly	Gly	Asp	Leu	Gly	Ser	Phe	Gly	Arg	Gly
			20					25					30		
Gln	Met	Gln	Lys	Pro	Phe	Glu	Glu	Ala	Thr	Tyr	Ala	Leu	Lys	Val	Gly
		35					40				45				
Asp	Ile	Ser	Asp	Ile	Val	Asp	Thr	Asp	Ser	Gly	Val	His	Ile	Ile	Lys
	50					55					60				
Arg	Thr	Glu													
65															

<210> 22
 <211> 45
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> consensus sequence

<400> 22

His	Ile	Leu	Val	Glu	Lys	Phe	Glu	Leu	Ala	Lys	Ser	Cys	Ser	Ser	Lys
1				5					10					15	
Gly	Gly	Asp	Leu	Gly	Phe	Arg	Gly	Gln	Met	Phe	Asp	Ala	Ala	Phe	Leu
			20					25					30		
Lys	Gly	Glu	Ser	Pro	Val	Thr	Gly	Tyr	His	Ile	Ile	Lys			
		35					40					45			